

FINAL REPORT

FORAGE INVESTMENT PLANNER

19980146

Funded by
The Agriculture Development Fund

July 2001
Prepared by: University of Saskatchewan



Canada¹³¹

Saskatchewan

Land Use Planner (formerly Forage Investment Planner)
Project Number 98000146
Final Report

March 31, 2001

Submitted to AFIF by
Jason Skotheim
Agri-Business Development Coordinator, Saskatoon
and
Don Surminsky,
Farm Management Agrologist, Yorkton



Summary

Depressed commodity prices and economic rationalization of the Western Canadian transportation system have forced producers and Farm Management Agrolologists to examine other farm enterprises including forage and livestock production systems. The Land Use Planner is a tool that can address this problem. The Land Use Planner is a user-friendly, multi-year, budgeting tool that enables comparison of returns between crops, forages and livestock enterprises. Due to the different investment and income schedules between the various available enterprises, a planning horizon of eight years was incorporated into the program.

Implicit within the objective of user-friendliness, is how fast a producer can start the program, intuitively enter relevant information, and obtain results based on general budgets from SAF and GAPT. Once preliminary results are generated the user is able to refine his information to make it more closely reflect his/her farming operation, and therefore obtain more accurate results.

The challenges met have been: determining information requirements for calculating costs/returns of various enterprises; to develop an intuitive user interface that enables allocation of enterprises to a parcel of land; to have the producer be able to provide all relevant information quickly and obtain results meaningful to their operation.

To date, the project has been challenged to advance in a timely manner due to changes in direction for the program. The final product is consistent with the objectives agreed to by the committee. The developer and consultant have met, and in numerous cases, exceeded the expectations of the committee during development of the program. The program is complete and currently being duplicated and prepared for distribution.

Technical report

Background and Objectives

The low returns to commodities have increased the attractiveness of adding value to grain production in Saskatchewan through livestock production. An alternative to high input, high investment crop production, is the relatively low input/investment forage

production as an input to the livestock industry or export to high valued markets. However, producers are hesitant about switching land to forage production due to its longer production and income cycle; the learning curve for forage production; their substantial investment in grain production infrastructure; and the commitment to remove land from grain production for an extended period of time.

The primary objectives of developing the Land Use Planner are to increase producer confidence in the production of forages, and to assist the producer in making sound enterprise decisions regarding forage and livestock investment. To do this, the producer must be able to compare crop rotations against forage, and livestock grazing considering capital requirements and the characteristics of the land complement. To accommodate this, a user-friendly computer program was envisioned based on the spreadsheet developed by GAPT and the University of Saskatchewan. The GAPT spreadsheet is very comprehensive consisting of 12 different sheets, and hundreds of input values. Producers indicated that the spreadsheet was much too elaborate, detailed, and problematic to generate confident results for the average computer user.

To overcome the problems associated with the complexity of the previous generation spreadsheet, several guiding principles were agreed upon and adopted. These are: user friendliness; intuitive design; and speed of information retrieval. These principles guided the design of the user interface and how the user enters relevant information into the program. The challenges to overcome the underlying problematic troubles of the spreadsheet were to make some simplifying assumptions regarding income and expenses associated from enterprises. These are: all production is sold within the year; cash flow is not accounted for; and equity statements are not produced. The program is strictly a budgeting tool in which the producer can determine the profitability of forage or livestock production relative to his current rotation.

The developer and consultant have been able to work within these principles and assumptions to generate the program. The software program is available through Rural Service Centres on Compact Discs. Support and updates will be available via the SAF Internet site.

Project activities and papers written

- The project procured the services of a Farm Management Consultant and a Computer Programmer, who have worked closely together to develop the interface, and information requirements.
- The consultants subsequently streamlined how the program handles, stores, and presents information entered by the producer.
- Designed and developed the user interface and how the user will proceed through the program and input information into the program.
- Developed a method in which updates to the program and associated data are easily accommodated.
- A comprehensive help system has been integrated into the software package.

Discussion of Results and Conclusions

- The project's progress is meeting, and exceeding, the objectives and principles specified by the steering committee. The change in the name of the program reflects the greater scope and application in which the program covers.

Information on Information Sharing

- Discussions have proceeded as to how the program is going to be distributed to producers. The steering committee has expressed that it should be provided free to producers who are considering rotational or enterprise adjustments.
- The delivery mechanism is to create and distribute CDs as requested.

Project success and relationship with the objectives of the Project

- The software program is in accordance with the objectives of the project proposal.

Milestones, Timelines, and deliverables

- The program has completed its test phase in which some bugs were reported and fixed. Copies of the CD have been duplicated and are being distributed to the Rural Service Centers.
- The release of the program will be covered through appropriate communication mediums as well as on the SAF Website, etc.
- Approximately 1200 copies of the program have been distributed to Rural Service Centres around the province. SAF forage and Farm Management Specialists will be using the program in their Extension activities in the coming year. Another 1300 CDs are on hand available for distribution.

Personnel

- The following two people were hired by the committee to fulfill the requirements of the project.
- Programming: Mike St. Louis
- Farm Management Consultant: Jim Caughlin

Equipment

- CD Media was purchased to distribute the program.

Project Photos

- No photos have been taken with respect to this project.

Innovation Fund Acknowledgement

- The AFIF logo is prominently shown on the 'splash screen' and in the *help->about* dialog of the program.
- The logo will also be prominently displayed on the CD, and other supporting documentation.

Project Public Information Materials

- No brochures, labels, or publications have been developed to date.